



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,608	05/23/2001	Peter J. Brittenham	RSW920010107US1	3650
7590 04/20/2006			EXAMINER	
Jeanine S. Ray-Yarletts IBM Corporation T81/503 PO Box 12195 Research Triangle Park, NC 27709			GOLD, AVI M	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/864,608		BRITTENHAM ET AL.	
	Examiner		Art Unit	
	Avi Gold		2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/30/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment filed on January 30, 2006. Claims 1, 3-5, 7-11, 18, 19, 22, and 23 were amended. Claims 24-29 were added. Claims 1-29 are pending.

Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 and 14-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dugan et al., U.S. Patent No. 6,363,411, in view of Onyeabor, U.S. Patent No. 6,631,512.

Dugan teaches the invention as claimed including an Intelligent Network architecture including a novel central administration and resource management system for administering and tracking service resources to a plurality of service nodes capable of telecommunications service processing (see abstract).

Regarding claims 1, 18, and 19, Dugan teaches a method, system, and computer program product for dynamically redeploying services in a computing network, comprising:

receiving a redeployment trigger for a selected service (col. 20, lines 14-19, col. 21, lines 1-7, Dugan discloses a service to be deployed);

determining one or more network locations where the selected service has been deployed from its original location at an origin server (col. 20, lines 14-19, Dugan discloses the tracking of capabilities of each service node);

programmatically removing the selected service from the network locations and the origin server (col. 20, lines 20-26, Dugan discloses service removal); and

programmatically replacing the selected service at the network locations and the origin server (col. 20, lines 19-26, Dugan discloses the deployment of data).

Dugan fails to teach the limitation further including the use of a selected web service wherein the selected web service includes executable code.

However, Onyeabor teaches Web page development, deployment, and execution conducive to database access and manipulation over the Internet (see abstract). Onyeabor teaches the use of the deployment of a web page with that web page including executable code (col. 6, lines 14-20, col. 16, lines 35-44).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dugan in view of Onyeabor to use a selected web service wherein the selected web service includes executable code. One would be motivated to do so

because it virtually eliminates the risk that malicious code will be downloaded (col. 6, lines 19-20).

Regarding claims 2, 20, and 21, Dugan teaches the method, system, and computer program product according to claims 1, 18, and 19, wherein the redeployment trigger comprises a redeployment request from the origin server (col. 20, lines 14-19).

Regarding claims 3, 22, and 23, Dugan teaches the method, system, and computer program product according to claims 1, 18, and 19 further comprising:

sending the redeployment trigger when the selected web service including the executable code is to be revised (col. 20, lines 14-26, col. 13, lines 56-61, Dugan discloses deployment when components have been successfully tested and configured).

Regarding claim 4, Dugan teaches the method according to claim 1, further comprising:

receiving client requests for the selected web service (col. 13, lines 26-40, Dugan discloses a user requesting service);

serving the received requests from the network locations prior to receiving the redeployment trigger (col. 13, lines 26-40, col. 20, lines 14-26); and

serving the received requests using the replaced web service after programmatically removing the selected web service and programmatically replacing the selected web service (col. 13, lines 26-40, col. 20, lines 14-26).

Regarding claim 5, Dugan teaches the method according to claim 1, further comprising:

unpublishing the selected web service after receiving the redeployment trigger until completion of programmatically removing the selected web service and programmatically replacing the selected web service, and then republishing the selected web service thereafter (col. 20, lines 14-45, Dugan discloses service node profiles).

Regarding claim 6, Dugan teaches the method according to claim 2, further comprising:

sending a subsequent redeployment request to each of the network locations, responsive to receiving the redeployment request from the origin server (col. 20, lines 14-26).

Regarding claim 7, Dugan teaches the method according to claim 6, wherein programmatically removing the selected web service further comprises:

receiving the subsequent redeployment request at a selected one of the network locations (col. 20, lines 14-26);

programmatically shutting down the selected web service at the selected one, responsive to receiving the subsequent redeployment request (col. 22, lines 44-67, Dugan discloses service data being deactivated); and

programmatically removing the executable code which implements the selected web service from a run-time environment of the selected one, subsequent to the programmatically shutting down (col. 20, lines 14-26, col. 22, lines 44-67).

Regarding claim 8, Dugan teaches the method according to claim 6, wherein programmatically replacing the selected web service further comprises:

issuing a deployment request for the selected web service from a selected one of the network locations (col. 20, lines 14-26);

receiving a response message at the selected one of the network locations the response message containing a replacement for the selected web service (col. 20, lines 14-26); and

deploying the replacement for the selected web service at the selected one of the network locations (col. 20, lines 14-26).

Regarding claim 9, Dugan teaches the method according to claim 8, wherein the deployment request comprises a web service description of the selected web service encoded in a standardized web service description notation (col. 20, lines 14-26).

Regarding claim 10, Dugan teaches the method according to claim 9, wherein the web service description comprises an interface definition of a dynamic deployment web service and an implementation definition of the dynamic deployment web service (col. 20, lines 14-26).

Regarding claim 11, Dugan teaches the method according to claim 10 wherein the dynamic deployment web service resides on the origin server (col. 20, lines 14-26).

Regarding claim 14, Dugan teaches the method according to claim 11, wherein the issued deployment request identifies the selected web service (col. 20, lines 14-26).

Regarding claim 15, Dugan teaches the method according to claim 11, wherein the issued deployment request provides information about run-time conditions on the selected one of the network locations (col. 20, lines 14-26).

Regarding claim 16, Dugan teaches the method according to claim 8, wherein the replacement comprises executable code (col. 20, lines 14-26).

Regarding claim 17, Dugan teaches the method according to claim 16, wherein the executable code is automatically adapted to the run-time conditions on the selected one of the network locations (col. 20, lines 14-26).

Regarding claims 24, 26, and 28, Dugan teaches the method, system, and computer program product according to claims 1, 18, and 19:

Wherein determining one or more network locations where the selected web service has been deployed includes determining all of the network locations where the selected web service has been deployed;

Wherein programmatically removing the selected web service from the network locations includes programmatically removing the selected web service from all of the network location where the web service has been deployed; and

Wherein programmatically replacing the selected web service at the network locations includes programmatically replacing the selected web service at all of the network locations where the web service has been deployed (col. 20, lines 14-25, col. 21, lines 1-7).

Regarding claims 25, 27, and 29, Dugan teaches the method, system, and computer program product according to claims 1, 18, and 19, wherein programmatically replacing the selected web service including updated executable code (col. 20, lines 19-26).

3. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dugan and Onyeabor further in view of Robotham et al., U.S. Patent No. 6,704,024.

Dugan teaches the invention substantially as claimed including an Intelligent Network architecture including a novel central administration and resource management system for administering and tracking service resources to a plurality of service nodes capable of telecommunications service processing (see abstract). Dugan teaches the invention substantially as claimed including a Web page development, deployment, and execution conducive to database access and manipulation over the Internet (see abstract).

As to claims 12 and 13, Dugan and Onyeabor teach the method of claim 11.

Dugan and Onyeabor fail to teach the limitation further including the method according to claim 11 wherein the issued deployment request comprises a SOAP ("Simple Object Access Protocol") request and a XML ("Extensible Markup Language") protocol request.

However, Robotham teaches a method for rendering and transforming visual content on a server system based on the display attributes of a client device, and transmitting the transformed visual content for display on a client device with respect to related browsing data (see abstract). Robotham teaches the use of SOAP and XML (col. 17, lines 10-15, lines 53-61).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dugan and Onyeabor in view of Robotham to use SOAP and XML for requests. One would be motivated to do so because both are well known in the art for application integration, as shown in the specification.

Response to Arguments

4. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's arguments filed January 30, 2005 have been fully considered but they are not persuasive.

Regarding the argument to claims 1, 18, and 19, the applicant argues that the reference, Dugan, does not disclose a redeployment request. The examiner respectfully disagrees, as seen in, col. 20, lines 14-26, there is the deployment of services and data which require maintenance, thus inherently involving redeployment. In addition on col. 20, line 66 – col. 21, line 7 there are retries of deployed data distribution, which is the same as redeployment.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,779,032 to Hericourt.

U.S. Pat. No. 6,418,452 to Kraft et al.

U.S. Pat. No. 6,055,570 to Nielsen.

U.S. Pat. No. 6,654,610 to Chen et al.

U.S. Pat. No. 6,167,444 to Boden et al.

U.S. Pat. No. 6,324,543 to Cohen et al.

U.S. Pat. No. 6,081,840 to Zhao

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2157

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2157

AMG


ABDULLAHISALAD
PRIMARY EXAMINER